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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,127	09/08/2003	Jang-Keun Oh	116511-00111	8650

27557 7590 03/19/2007  
BLANK ROME LLP  
600 NEW HAMPSHIRE AVENUE, N.W.  
WASHINGTON, DC 20037

EXAMINER
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REDDING, DAVID A

ART UNIT	PAPER NUMBER
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1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/656,127

Applicant(s)

OH, JANG-KEUN

Examiner

David A. Redding

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1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15, 19, 20, 25-36 and 39-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 and 26-35 is/are allowed.
- 6) ☒ Claim(s) 19, 20, 25 and 39-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/26/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 19,20,25,39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,757,933 (Oh et al.) in view of USP 5,779,745 (Kilstrom) and USP 6,436,160 ('160).

Oh et al. discloses a dust collecting apparatus comprising a cyclonic chamber (310) having an air inlet (311), an air outlet (313), a dust receptacle (400), a grill body (340) disposed inside the cyclone body (310) a main filter assembly (360) having a dust blocking member (351).

USP 5,757,933 is silent as to a supplementary filter system.

The Kilstrom patent discloses a cyclonic dust collector which includes a supplemental filter assembly (51) downstream from the cyclonic chamber.

Accordingly, it would have been obvious to one skilled in the art to provide the supplemental filter (51) outside the cyclonic chamber of the '628 patent in order to further remove dust particles prior to exhausting the air.

USP 5,757,933 is silent as to a main filter member including folds.

USP 6,436,160 discloses a vacuum having a filter (70) as claimed supported on a frame (82) as claimed.

Accordingly, it would have been obvious to one skilled in the art to use the filter in the '160 patent as the main filter in USP 5,757,933 in view of the use disclosed in the '160 patent.

The US patent references cited above teach all of the elements of claim 25 and 40 with the exception of the screw hole in the upper side of the screw body. USP 6,757,933 shows the grill body (340) held against the upper wall of the cyclone body (310) but does not explain how the grill body (340) is held. However, it would have been obvious to one skilled in the art to include screw holes in the upper side of the grill body (340) since the body (340) is held against the cyclone body in an undisclosed manner.

USP 6,757,933 does not disclose the grill body (340) and main filter assembly (360) are integral.

In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice." Accordingly, integrating the grill body and filter assembly is an obvious design choice.

***Allowable Subject Matter***

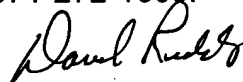
Claims 1-15,26-35 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Redding whose telephone number is 571-272-1276. The examiner can normally be reached on Mon.-Fri. 6:00 - 3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran-Piazza can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David A Redding  
Primary Examiner  
Art Unit 1744

DAR